

First record of a cingulopsid (*Eatonina laurensi* n.sp.)

in the western Atlantic*.

R.G. MOOLENBEEK & M.J. FABER

Zoölogisch Museum Amsterdam, P.O.Box 4766, NL-1009 AT Amsterdam, The Netherlands.

ABSTRACT. *Eatonina laurensi* n.sp. is described from Mexico, Tulum and it is the first record of a cingulopsid species occurring in the western Atlantic. *Rissoa* (*Cingulina*) *curta* Dall, 1927 is figured for the first time.

RESUME. Une nouvelle espèce (*Eatonina laurensi* n.sp.) de Cingulopsidae est décrite de Mexico, Tulum. C'est la première signalisation d'un membre de cette famille d'Atlantic Occidental. *Rissoa* (*Cingulina*) *curta* Dall, 1927 est figuré pour la première fois.

KEYWORDS: Gastropoda, Cingulopsidae, *Eatonina*, Recent Taxonomy, Mexico, Yucatan, Caribbean.

INTRODUCTION.

According to PONDER (1989) cingulopsids occur mainly in Australasia with a few species in southern Africa, the tropical Indo-west Pacific, the western Americas, the antarctic-subantarctic regions, and the eastern Atlantic- Mediterranean Sea. Its supposed absence in the western Atlantic, has led PONDER (1989: 87) to suggest that their current disjunct distribution may constitute an eastern Tethyan relict. However, FABER (1984) already pointed out that distribution patterns of marine micromolluscs in the West Indies are poorly known, a statement later confirmed by PEIUCH (1987, 1990) who observed that the east coast of central America is one of the most unexplored parts of the Caribbean.

During the last ten years we have studied many samples from most of the Caribbean islands, but obtention of material from the western Caribbean mainland is more difficult. In July 1990, Laurens Duiveman kindly collected sediment samples in that area. In one of these samples, taken in the Mexican province Quintana Roo, an interesting micromollusc was found. The species below described is the first record of a cingulopsid species for the western Atlantic.

Eatonina laurensi n.sp.

figs. 1, 3-4

DESCRIPTION OF HOLOTYPE (ZMA Moll. 3.90.020):

Shell minute (length 0.8 mm, width 0.6 mm), ovate-conical, opaque, smooth, umbilicated (fig. 1). Protoconch with one whorl, sculpture of extremely minute spiral cords; teleoconch of 2 1/2 convex, somewhat shouldered whorls, smooth except for growth lines. Aperture subcircular and holostomatous. Outer lip orthocone, simple. Umbilicus wide with rather strong growth lines inside.

Colour: Protoconch white. First teleoconch whorl milky white, adapically with small brown edge, lowest part of first teleoconch whorl brown, which becomes an irregular brown mid-body band on the penultimate whorl and gradually disappears on the body whorl. A small brown band present just below the periphery, fading away towards the aperture. Base brown. A brown blotch present adapically on outside aperture

* Studies on West Indian marine molluscs, 23.

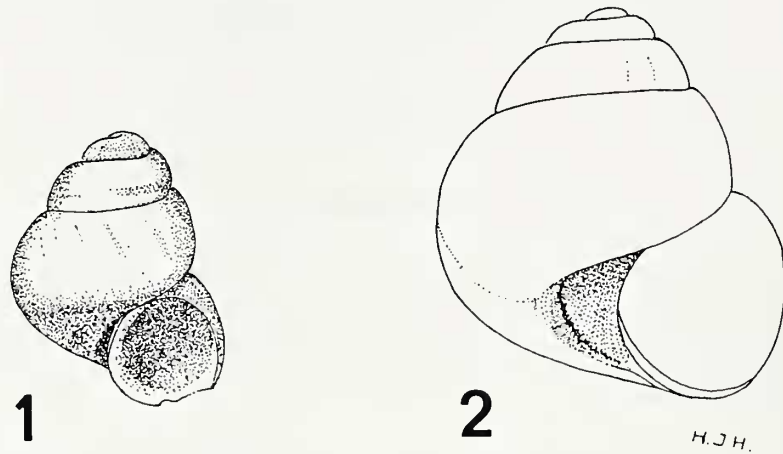
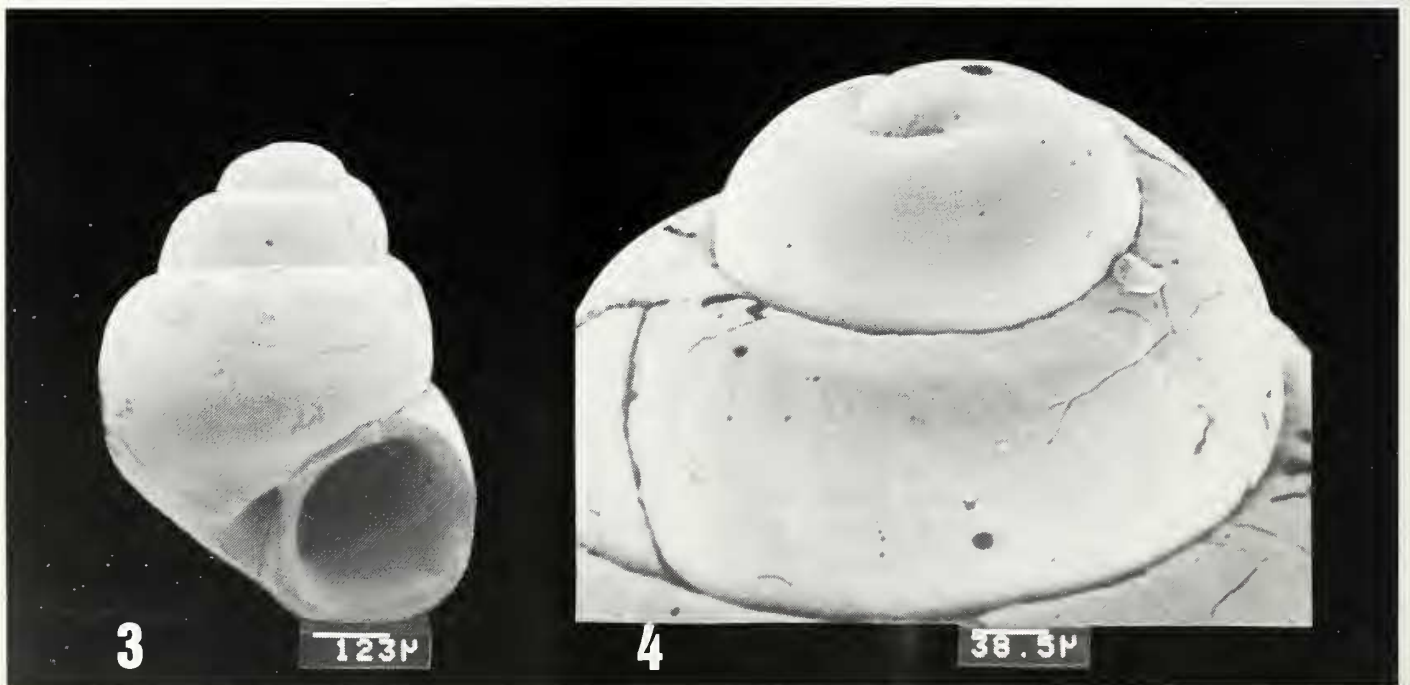


Fig. 1. Holotype of *Eatonina laurensi* n.sp., Mexico, Tulum, 18.7.1990, leg. L. Duiveman, length 0.8 mm.

Fig. 2. Holotype of *Rissoa (Cingulina) curta* Dall, 1927, Florida, off Fernandina, 294 fms (USNM 333454), length 1.2 mm, width 1.1 mm.



Figs. 3-4. Paratype of *Eatonina laurensi* n.sp., Mexico, Tulum, 18.7.1990, leg. L. Duiveman. 3. ventral view. 4. apical view.

TYPE LOCALITY- MEXICO, Yucatan, Quintana Roo, Tulum, 18 July 1990, leg. L. Duiveman.

VARIABILITY- All 15 paratypes (ZMA Moll. 3.90.021) are from the type locality. In length they vary from 0.7 to 0.8 mm. More variable is the colour pattern ranging from nearly opaque white to specimens with more pronounced brown bands or spots.

DISCUSSION- *Eatonina fulgida* (J. Adams, 1797) has similar conchological characteristics. However, *E. laurensi* n.sp. differs in having a spirally striated protoconch. Also its coloration is opaque white with irregular brown bands. Colour and size agree more similar to those in *E. vermeuleni* Moolenbeek, 1986, from the Cape Verde Islands. This species has a smooth protoconch and is non-umbilicated. On the Pacific coast of West America, uniform brown shells occur in species belonging to the subgenus *Mistostigma* (see PONDER & YOO 1980, fig. 14a). Whether the new species belongs to that subgenus or to the eastern Atlantic ones is still to be studied. The only eastern Atlantic species which could be compared to our new taxon is *Rissoa (Cingulina) curta* Dall, 1927 (fig. 2). PONDER (1983) assigned it (syntypes [sic.]) to the family Skeneidae but after examining the holotype (USNM no. 333454) we think it might be a cingulopsid or a rissoid species. However, the unique specimen (length 1.3 mm.), which might be bleached, is all white with a skeneid-like umbilical rim (fig. 2).

ETYMOLOGY- This new species is named after Laurens Duiveman, who introduced electrophoresis in our Department of Malacology during his biology study and kindly collected these interesting sediment samples during his holidays in Mexico.

REMARKS- The European cingulopsid species were recently revised by AMATI (1987) and those from the Cape Verde Islands by ROLAN & TEMPLADO, (in press). As already mentioned PONDER (1989) published a theory about the absence of this family in the western Atlantic. A study of live animals and anatomy is needed to clarify the relation of this new species with eastern Atlantic and/or eastern Pacific congeneric species.

ACKNOWLEDGEMENTS

We are grateful to Laurens Duiveman (Amsterdam) for collecting and donating these sediment samples, and to Dr Henry E. Coomans and an unknown referee for valuable suggestions concerning the manuscript. Shelley S. Greenhouse and Dr. R.S. Houbriek (United States National Museum) kindly sent in loan the holotype of *Rissoa curta* Dall, 1927 and H. J. Hoenselaar made the drawing.

LITERATURE

AMATI, B., 1987. Il genere *Eatonina* Thiele, 1912, nei mari Europei (Gastropoda; Prosobranchia). *Notiz. CISMA*, 9: 31-43.

DALL, W.H., 1927. Small shells from dredgings off the southeast coast of the United States by the United States fisheries steamer "Albatross" in 1885 and 1886. *Proc. United States Nat. Mus.*, 70: 1-134.

FABER, M.J., 1984. A new species of *Rissopsetia* (Gastropoda: Pyramidellidae) from the Caribbean Sea. *Stud. Fauna Curaçao Car. Islands*, 209: 110-112

MOOLENBEEK, R.G., 1986. A new species of *Eatonina* from the Cape Verde Islands. *Notiz. CISMA*, 7/8: 67-69.

PEIUCH, E.J., 1987. New Caribbean molluscan faunas. CERF, Charlottesville: 1-271.

PEIUCH, E.J., 1990. A new Molluscan faunule from the Caribbean coast of Panama. *Nautilus*, 104: 57-71.

PONDER, W.F., 1983. Reclassification of some American species assigned to Rissoidae (sensu lato). *Nautilus*, 97: 90-91.

PONDER, W.F., 1989. Mediterranean Cingulopsidae, a relict eastern Tethyan fauna (Gastropoda: Cingulopsidae). *Boll. Malacologico*, 25: 85-90.

PONDER, W.F. & E.K. YOO, 1980. A review of the genera of the Cingulopsidae with a revision of the Australian and tropical Indo-Pacific species. *Rec. Austr. Mus.*, 33: 1-88.